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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/826,461

Applicant(s)

RICHARDS ET AL.

Examiner

SRINIVASA R. REDDIVALAM

Art Unit

2419

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21-25, 27-30 and 33-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 21-25, 27-30, and 33-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on 09/29/2008 has been entered. Claims 35 and 37 are amended and claims 31-32 are cancelled. Claims 1-19, 21-25, 27-30, and 33-38 are still pending in the application.

Claim Objections

2. Claim 21 is objected to because of the following informalities:

In claim 21, line 1, the words 'claim 19' should be inserted in place of the words 'claim 20' as claim 20 is cancelled. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 35-38 are rejected under 35 U.S.C. 102(a) as being anticipated by Telefonaktiebolaget LM Ericsson (Pub. No: WO-2004/016012 A1).

Regarding claim 35, Telefonaktiebolaget LM Ericsson teaches a method of requesting a multicast service by user equipment in a first cell (see Abstract and paragraphs [0049] and [0054] wherein user equipment requesting a multicast service to the network is mentioned), wherein the first cell created by a first base station (see Fig.2), and wherein the first base station has a group of neighbouring cells created by a respective group of neighbouring base stations (see Figs. 1 and 2), the method

comprising: determining, for one or more of the neighbouring cells, whether a signal from the respective neighbouring base station is receivable by the user equipment (see para [0050]); creating a first list from the receivable neighbouring cells (see para [0051]);

generating a user request message, wherein the user request message includes a request for a multicast service and the first list of receivable neighbouring cells (see paragraphs [0052] & [0053]); and transmitting the user request message from the user equipment to the first base station (see paragraphs [0052] & [0054]).

Regarding claim 36, Telefonaktiebolaget LM further teaches the method wherein creating a list from the receivable neighbouring cells includes: determining whether the receivable signal is combinable by the user equipment and including in the first list an indication of cells determined to be combinable (see para [0050] wherein mobile station using soft combining of receivable signal from other cells is mentioned).

Regarding claim 37, Telefonaktiebolaget LM further teaches the method further comprising: determining a signal measurement for each cell in the list of received neighbouring cells wherein the user request message further includes the signal measurement for each cell in the list of receivable neighbouring cells (see para [0051]).

Regarding claim 38, Telefonaktiebolaget LM teaches a method to initiate multicast service in group of cells, the method (see Abstract) comprising:
transmitting a network message to initiate a response from a user equipment in the first cell (see para [0034] wherein a network sending a message with registration request flag to mobile station is mentioned); receiving a user message transmitted by the user

equipment positioned in the first cell (see paragraphs [0052-53] wherein mobile station sending message back with registration request is mentioned) and in response to the user message, initiating the multicast service in the group of cells neighbouring the first cell (see para [0054] wherein network initiating the multicast service in the group of cells neighbouring the first cell is mentioned).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 1, 18 and 23 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Jung et al. (Pub No: 2005/0213541) in view of Telefonaktiebolaget LM Ericsson (Pub. No: WO-2004/016012 A1)

Regarding claim 1, Jung et al. teach a method for determining whether to initiate (or transmit) multicast service from a first base station of a first cell (i.e. node B in DRNC in Fig.2), the method comprising: receiving a user message (i.e. MBMS UE linking message transmitted by CN in Fig.7), wherein the first cell (i.e. node B in DRNC in Fig.2) is a neighbour of the second cell (i.e. node B in SRNC in Fig.2), and wherein the user message includes a list of one or more neighbouring cells [see page 5, para [0077] wherein SRNC receiving neighboring cell information through MBMS UE linking message from CN i.e. core network is mentioned]; and in response to the message, initiating the multicast service in the first cell, wherein the first cell is listed in the list of one or more neighboring cells and the selection of the first cell to initiate the multicast service is not by the user equipment (see paragraphs [0085] and [0087] wherein SRNC initiating multicast service in the 1st cell is mentioned and is also mentioned the selection of the cell to initiate multicast service is done by SRNC sending MBMS connection request message to DRNC and not by the user equipment).

Jung et al. differ from the claimed invention in that the user message containing neighboring cell information is transmitted from CN instead of from UE as claimed.

However, Telefonaktiebolaget LM Ericsson teaches user message containing

neighbouring cell list information is transmitted from UE (see paragraphs [0050], [0051] and [0052]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Jung et al. to include transmitting the user message by UE disclosed by Telefonaktiebolaget LM Ericsson in order to guarantee providing the multicast service in 1st cell thereby improving the performance of the network.

Regarding claim 18, Jung et al. further teach the method further comprising allowing the user equipment to join the multicast service (page 3, [0036]).

Regarding claim 23, Jung et al. teach a method to assist determining whether to initiate (or transmit) a new multicast service within a mobile radio network, wherein user equipment is positioned in a first cell of a first base station (see Fig.2 for UE in node B of SRNC) having a group of neighbouring cells, the method comprising: transmitting the user message (see Fig.7, para [0077] wherein transmitting UE linking message containing neighbouring cell information from CN to SRNC is mentioned) and receiving a network message generated responsive to the user message (see para [0085] wherein SRNC sending network message i.e. MBMS connection request message to DRNC is mentioned), wherein the network message indicates a new transmission of the multicast service by a second base station in a second cell (see para [0085] wherein transmission of multicast service in second cell is mentioned);

Jung et al. do not teach specifically the method comprising determining for each neighbouring cell in the group of neighbouring cells, whether the user equipment can detect the neighbouring cell and generating a user message indicating which of the neighbouring cells the user equipment can detect.

However, Telefonaktiebolaget LM Ericsson teaches the method comprising determining for each neighbouring cell in the group of neighbouring cells, whether the user equipment can detect the neighbouring cell and generating a user message indicating which of the neighbouring cells the user equipment can detect (see paragraphs [0050], [0051] and [0052]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Jung et al. to include determining for each neighbouring cell in the group of neighbouring cells, whether the user equipment can detect the neighbouring cell and generating a user message indicating which of the neighbouring cells the user equipment can detect, disclosed by Telefonaktiebolaget LM Ericsson in order to guarantee providing the new multicast service in 2nd cell thereby improving the performance of the network.

8. Claims 2, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al. (Pub. No: 2005/0213541) in view of Telefonaktiebolaget LM Ericsson (Pub. No: WO-2004/016012 A1) and further in view of Cooper (US Pub. No: 2006/0194582 A1).

Regarding claim 2, Jung et al. and Telefonaktiebolaget LM Ericsson differ from the claimed invention in that the user message is transmitted in response to the network message transmitted from 2nd base station to request the UE to provide neighbouring cell information.

However, Cooper teaches (see para 0046) that the active network (i.e. UMTS) signals neighbour cell information to the user equipment to request for proper neighbouring cell and user equipment searches for cell availability, determines neighbouring cell and transmits the user message to the network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Jung et al. and Telefonaktiebolaget LM Ericsson to include transmitting network message to request UE to provide neighbouring cell information disclosed by Cooper in order to guarantee providing the multicast service in 1st cell thereby improving the performance of the network.

Regarding claim 14, Jung et al. and Telefonaktiebolaget LM Ericsson don't teach specifically that the method further comprising:
transmitting from a 2nd base station in the 2nd cell, an initial message to indicate to the user equipment a list of cells that are neighbours to the 2nd cell.

However, Cooper teaches (see para 0046, lines 10-13) that the active network (i.e. UMTS) signals neighbouring cell information to the user equipment.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Jung et al. and Telefonaktiebolaget LM Ericsson to include transmitting network message to indicate to UE the list of neighbouring cell information disclosed by Cooper in order to guarantee providing the multicast service in 1st cell thereby improving the performance of the network.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al. (Pub. No: 2005/0213541) in view of Telefonaktiebolaget LM Ericsson (Pub. No: WO-2004/016012 A1), further in view of Cooper (US Pub. No: 2006/0194582 A1) and further In view of 3GPP TS 25.346 V6.0.0 (2004-03) ("3GPP").

Regarding claim 17, Jung et al., Telefonaktiebolaget LM Ericsson and Cooper fail to teach for the method wherein, the network message includes a cause value that indicates an enhanced counting procedure is invoked for the multicast service.

However, "3GPP" teaches that the method, wherein the network message includes a cause value (Page 14, Section 5.2.5, 1st para) that indicates an enhanced counting procedure is invoked for the multicast service.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Jung et al., Telefonaktiebolaget LM Ericsson and Cooper for claim 2 to include the cause value in the network message disclosed by "3GPP" to indicate an enhanced counting procedure is invoked for the multicast service.

10. Claims 19, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al, (Pub. No: 2005/0213541) in view of Cooper (US Pub. No: 2006/0194582 A1).

Regarding claim 19, Jung et al. teach a method for determining whether to initiate a multicast service in a group of cells in a network, the method comprising: receiving one or more user messages (i.e. MBMS UE linking message transmitted by CN in Fig.7) transmitted by core network (i.e. CN), wherein each one or more user messages includes a list of one or more neighbouring cells [Page 5, 0077]; and for each cell of the group of cells, accumulating a **first count** (page 2, [0026], lines 8-11) of the user messages having the cell included in the list of one or more neighbouring cells and accumulating a **second count** of the user messages received from user equipment (see Fig.3 and page 2, para [0024] wherein any user/terminal sending message to network to receive multicast service is mentioned and this user need not be in the list of neighboring cells and also see para [0026], lines 8-11 wherein counting function is mentioned to accumulate the second count of the these user messages); and for each cell of the group of cells, initiating the multicast service in the cell if the first count /second count for the cell is not zero (page 2, [0029], lines 8-12 and Jung et al. teach that network (i.e. RNC) performs a counting function of recognizing the number of UE terminals in a particular cell and according to the result of counting process, network (i.e. RNC) does transmit the multicast service if the count is not zero).

Jung et al. differ from the claimed invention in that user messages are transmitted from CN instead of from UE as claimed.

Cooper (page 3, [0046], lines 11-14 and claim 27) teaches that user messages from different user equipment in group of cells containing different neighbouring cell information is received by network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Jung et al. to include transmitting user messages from different UE in a group of cells that contain neighbouring cell information to the network disclosed by Cooper to perform counting of the user messages from UE in a cell and initiate multicast service in that cell if the first count/second count is not zero i.e. multicast is only transmitted in the cell if at least one user is available and wants the service thus improving network transmission efficiency for multicast service.

Regarding claims 21 and 22, Jung et al. further teach for the method, wherein initiating the multicast service in a cell if the second count or first count for the cell is not zero includes:

initiating a point-to-point multicast service in the cell if the first count +second count or first count is less than a threshold number; and initiating a point-to-multipoint multicast service in the cell if first count +second count or the first count is greater than the threshold number (page 2, [0028], lines 3-7).

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et

al. (Pub. No: 2005/0213541) in view of Cooper (US Pub. No: 2006/0194582 A1) and further in view of 3GPP TS 25.346 V6.0.0 (2004-03) ("3GPP").

Regarding claim 7, Jung et al. and Cooper do not teach specifically the method wherein the list of one or more neighbouring cells indicates base stations having transmissions that user equipment is able to demodulate.

However, "3GPP" teaches the method wherein the list of one or more neighbouring cells indicates base stations having transmissions that user equipment is able to demodulate (see page 21, section 7.1 and also see pages 23-24, sections 7.3.1 – 7.3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Jung et al. and Cooper to include the list of one or more neighbouring cells that indicates base stations having transmissions that user equipment is able to demodulate disclosed by 3GPP in order to have better reception of multicast service.

12. Claims 3-6, 8, 9-13, 15-16, 24-25, and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al. (Pub. No: 2005/0213541) in view of Telefonaktiebolaget LM Ericsson (Pub. No: WO-2004/016012 A1) and further in view of 3GPP TS 25.346 V6.0.0 (2004-03) ("3GPP").

Regarding claims 3-6 and 8, Jung et al. and Telefonaktiebolaget LM Ericsson teach the method of claim 1 above.

Jung et al. and Telefonaktiebolaget LM Ericsson do not teach specifically for the method, wherein the list of one or more neighbouring cells that indicate base stations having transmissions that UE can detect or de-modulate is a list of neighbouring cells the UE could use for combining if the multicast service is initiated in the listed neighbouring cell or transmitted by the indicated base station.

However, "3GPP" teaches the method, wherein the list of one or more a neighbouring cell (or base stations) is a list of neighbouring cells (or base stations having transmissions that UE can detect or demodulate) the user equipment could use for combining if the multicast service is initiated in the listed neighbouring cell or transmitted by the indicated base station (see page 21, section 7.1 and also see pages 23-24, sections 7.3.1 – 7.3.5 of "3GPP" teach that user equipment performs selective combining if UE has valid MBMS neighbouring cell information of that cell for MBMS reception).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Jung et al. and Telefonaktiebolaget LM Ericsson to include that UE could use list of neighbouring cells that indicate base stations having transmissions that UE can detect or de-modulate, for combining if the multicast service is initiated in the listed neighbouring cell as disclosed in "3GPP" in order to have better reception of multicast service.

Regarding claims 9-13, Jung et al. and Telefonaktiebolaget LM Ericsson teach the

method of claim 1 above.

Jung et al. and Telefonaktiebolaget LM Ericsson do not teach specifically for the method, wherein the user message further includes a signal measurement which is indicative of one or more signal quality, an error rate, a received signal power, a beacon signal power, a pilot signal power, signal power of existing multicast transmission or signal to noise ratio, for each cell in the list of one or more neighbouring cells.

However "3GPP" teaches for the method of claim 1, wherein the user message further includes a signal measurement for each cell (Page 21, section 7.1, 7th para. i.e. based on threshold e.g. measured CPICH EC/N0 from neighbouring cell) in the list of one or more neighbouring cells and the signal measurement (i.e. the threshold) can be an error rate (i.e. block error rate, CRC), a received signal power, a beacon signal power, a pilot signal power or EC/No that UE could use in selective combining.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Jung et al. and Telefonaktiebolaget LM Ericsson to include the user message further includes a signal measurement that is indicative of one or more of a signal quality for each cell in the list of neighbouring cells disclosed by "3GPP" in order to facilitate UE to determine neighbouring cell suitable for selective combining.

Regarding claims 15 & 16, Jung et al. and Telefonaktiebolaget LM Ericsson teach the

method of claim1 above.

Jung et al. and Telefonaktiebolaget LM Ericsson do not teach specifically that the method, further comprising transmitting from a 2nd base station in the 2nd cell, an initial message to wake the UE in 2nd cell from an idle mode wherein the initial message is a page notification message including a set of indicators corresponding to a respective set of multicast services and wherein each of the indicators indicates whether the second base station is transmitting an updated multicast control channel message.

However, "3GPP" teaches that the method comprising the act of transmitting from a second base station in the second cell, an initial message to wake the user equipment positioned in the second cell from an idle mode (Page 26, Section 8.1.1, 1st para, lines 2-3 i.e. UTRAN may first apply conventional paging to move UEs in URA_PCH to Cell_PCH state) and wherein the initial message is a page notification message including a set of indicators corresponding to a respective set of multicast services (Page 13, Section 5.2.4, 3rd para), and wherein each of the indicators indicates whether the second base station is transmitting an updated multicast control channel message.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Jung et al. and Telefonaktiebolaget LM Ericsson to include transmitting an initial message, which is a page notification message including a

set of indicators corresponding to a respective set of multicast services, from a 2nd base station in a 2nd cell to wake the user equipment positioned in the second cell from an idle mode disclosed by "3GPP" to apply counting to determine the most optimal mode for multicast service.

Regarding claims 24-25, and 27-30, Jung et al. and Telefonaktiebolaget LM Ericsson teach the method of claim 23 above.

Jung et al. and Telefonaktiebolaget LM Ericsson do not teach specifically the method further comprising: receiving 1st signal from 1st base station transmitting the multicast service & receiving 2nd signal from 2nd base station transmitting the multicast service and combining these two signals and also the base station transmission that UE can detect, is combined if multicast service is enabled in the base station and determining a signal measurement for each of the neighbouring cells and that are detected wherein user message further includes signal measurement i.e. indicative of received beacon signal or pilot signal power for each of the neighbouring cells and that are detected.

However, "3GPP" teaches for the method, wherein the user message further includes a signal measurement for each cell (Page 21, section 7.1, 7th para. i.e. based on threshold e.g. measured CPICH EC/N0 from neighbouring cell, UE determines neighbouring cell suitable for selective combining) in the list of one or more

neighbouring cells and the signal measurement (i.e. the threshold) can be a received, signal power, a beacon signal power, and a pilot signal power UE could use in selective combining of two signals that are transmitted from 2 base stations that UE can detect having the multicast transmissions.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Jung et al. and Telefonaktiebolaget LM Ericsson to include that UE could use two signals from two base stations having multicast transmissions that UE can detect, for combining and wherein the user message further includes a signal measurement that is indicative of received beacon signal power or pilot signal power for each cell in the list of neighbouring cells disclosed by "3GPP" in order to facilitate UE to determine neighbouring cell suitable for selective combining.

13. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over 3GPP TS 25.346 V6.0.0 (2004-03) ("3GPP") in view of Cooper (Pub. No: 2006/0194582).

Regarding claim 33, "3GPP" teaches that method of signaling between user equipment and a network across an air interface, wherein the user equipment is positioned in a first cell created by a first base station, wherein a set of neighbouring base stations create a respective set of neighbouring cells, and wherein the first base station transmits on a downlink and the user equipment transmits on an uplink, the method comprising: signaling, on the downlink, an initiation of a counting procedure for a multicast service (Page 14, section 5.2.5 & page 25, section 8.1.1, 1st para, lines 1-3); signaling, on the uplink, a second list including an indication of acceptable cells from the first list (see page 21, section 7.1. 7th para).

"3GPP" does not teach specifically the method comprising signaling, on the downlink, a first list of all neighbours of the first base station.

However, Cooper teaches the method comprising signaling, on the downlink, a first list of all neighbours of the first base station (see block 102 in Fig.1 and also see page 3, [0046]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention, to modify the method of "3GPP" to include transmit signaling, on the downlink, a first list of all neighbours of the first base station disclosed by Cooper to support providing the multicast service in one of the neighbouring cells.

14. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over 3GPP TS 25.346 V6.0.0 (2004-03) ("3GPP") in view of Cooper (Pub. No: 2006/0194582) and further in view of Telefonaktiebolaget LM Ericsson (Pub. No: WO-2004/016012 A1).

Regarding claim 34, "3GPP" and Cooper do not teach specifically the method comprising signaling on the uplink, a third list including a signal measurement for each of the acceptable cells from the second list.

However, Telefonaktiebolaget LM Ericsson teaches the method comprising signaling on the uplink, a third list including a signal measurement for each of the acceptable cells from the second list (see paragraphs [0050], [0051] and [0052]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention, to modify the method of "3GPP" and cooper to include sending signaling on the uplink, a third list including a signal measurement for each of the acceptable cells from the second list disclosed by Telefonaktiebolaget LM Ericsson for providing optimum multicast service to required cells in the network.

Response to Arguments

15. Applicant's arguments filed on 09/29/2008 have been fully considered but they are not persuasive.

16. In page 9 of Applicant's Remarks, regarding claim 35, Applicant mentions that Telefonaktiebolaget does not disclose a "user message" containing both "a request for multicast service" and a "first list of received neighboring cells" as recited by claim 35. **However, this statement from the Applicant is not valid as Telefonaktiebolaget LM Ericsson teaches user message containing both a request for multicast service and a first list of receivable neighboring cells as recited by claim 35 (see page 19, paragraphs [0053] & [0054] wherein the mobile station recognizing the need to register with the network to provide an indication of the mobile's active set for multicast service and sending the registration request to the network are mentioned and this is clearly equivalent to the user message containing both a request for multicast service and a first list of receivable neighboring cells as recited by claim 35).**

17. In page 10 of Applicant's Remarks, regarding claim 38, Applicant mentions that Telefonaktiebolaget does not disclose "receiving a user message ... in the first cell" and "initiating the multicast service in the group of cells neighboring the first cell," as recited by claim 38. **However, this statement from the Applicant is not valid as Telefonaktiebolaget LM Ericsson teaches "receiving a user message ... in the first cell" and "initiating the multicast service in the group of cells neighboring the first cell," as recited by claim 38 (see page 19, para [0054] wherein, in response to receiving the registration request, the network activating the broadcast/multicast service only in the service areas identified in the requesting mobile station's reported active set is mentioned which is equivalent to 'in response to the user message, initiating the multicast service in the group of cells neighbouring the first cell').**

18. In pages 10-11 of Applicant's Remarks, regarding claims 1 and 23, Applicant mentions that Jung does not disclose providing multicast service in a cell different from the cell containing the user equipment. **However, this statement from the Applicant is not valid as Jung discloses providing multicast service in a cell different from the cell containing the user equipment (see pages 5 & 6, para [0085] wherein the SRNC sensing the movement of the terminal/user_equipmnet from 2nd cell and transmitting an MBMS connection request message to a DRNC i.e. 1st cell is mentioned and thus Jung in combination with Telefonaktiebolaget LM Ericsson teach all the limitations of the claims 1 and 23 as explained under Claim Rejections above).**

19. In page 12 of Applicant's Remarks, regarding claim 19, Applicant mentions that Jung does not disclose "user messages" which include a list of neighboring cells and "accumulating a first count of user messages having the cell included in the list," as recited by claim 19. **However, this statement from the Applicant is not valid as Jung et al. in combination with Cooper teach user messages which include a list of neighboring cells and accumulating a first count of user messages having the cell included in the list, as recited by claim 19** (see Jung et al. teach receiving one or more user messages (i.e. MBMS UE linking message transmitted by CN in Fig.7) transmitted by core network (i.e. CN), wherein each one or more user messages includes a list of one or more neighbouring cells [Page 5, 0077]; and for each cell of the group of cells, accumulating a **first count** (page 2, [0026], lines 8-11) of the user messages having the cell included in the list of one or more neighbouring cells and accumulating a **second count** of the user messages received from user equipment (see Fig.3 and page 2, para [0024] wherein any user/terminal sending message to network to receive multicast service is mentioned and this user need not be in the list of neighboring cells and also see para [0026], lines 8-11 wherein counting function is mentioned to accumulate the second count of the these user messages); and for each cell of the group of cells, initiating the multicast service in the cell if the first count /second count for the cell is not zero (page 2, [0029], lines 8-12 and Jung et al. teach that network (i.e. RNC) performs a counting function of recognizing the number of UE terminals in a particular cell and according to the result of counting process, network (i.e. RNC) does transmit the multicast service if the count is not zero.

Jung et al. differ from the claimed invention in that user messages are transmitted from CN instead of from UE as claimed. Cooper (page 3, [0046], lines 11-14 and claim 27) teaches that user messages from different user equipment in group of cells containing different neighbouring cell information is received by network. Thus Jung et al. in combination with Cooper teach all the limitations of claim 19 as explained under Claim Rejections above).

20. In page 13 of Applicant's Remarks, regarding claim 33, Applicant mentions that 3GPP does not disclose the user equipment transmitting a second list including an indication of acceptable cells from the list of neighboring cells, as recited by claim 33.

However, this statement from the Applicant is not valid as 3GPP clearly teaches a second list including an indication of acceptable cells from the list of neighboring cells (see page 7, section 7.1 wherein the UE determining the neighbouring cell suitable for selective combining based on threshold and the presence of MBMS Neighbouring Cell Information of that neighbour cell is mentioned which is equivalent to the user equipment transmitting a second list including an indication of acceptable cells from the list of neighboring cells and thus 3GPP in combination with Cooper teach all the limitations of claim 33 as mentioned above under Claim Rejections).

21. The rejection of all other dependent claims is already explained under Claim Rejections above.

Conclusion

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

23. Any response to this office action should be faxed to (571) 273-8300 or mailed

To:

Commissioner for Patents,
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SRINIVASA R. REDDIVALAM whose telephone number is (571)270-3524. The examiner can normally be reached on Mon-Fri 9:30 AM - 7 PM (1st Friday OFF).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chirag Shah can be reached on 571-272-3144. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Srinivasa R. Reddivalam
01/03/2009
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/Chirag G Shah/

